Serial No.: 10/583,795 Filed: June 21, 2006 Page: 10 of 13

REMARKS

Following entry of this amendment, claims 3, 6, 7, 14-16, 19-22, 24-27, 29, 32, 34, 36-39, 41, and 43-53 will be pending in this application. Claims 8, 31, 35, 40, and 42 are canceled herein; claims 14, 16, 32 and 43-45 are currently amended; and new claims 47-53 are added. Support for the amendments and new claims can be found throughout the application as originally filed. No new matter has been added.

Applicants acknowledge and thank the Examiner for the withdrawal of several objections and rejections made in the previous Office action, including objections to the specification and claims and rejections under 35 USC §§ 101, 102, 112, first and second paragraphs, and for alleged double patenting.

Examiner Interview Summary

Applicants thank Examiner Bristol for her participation in telephone interviews with the undersigned on March 31, 2009. Examiner Bristol helpfully clarified that the instant action was indeed non-final, as indicated on the instant Office Action Summary, form PTOL-326, because Aburatani et al. (WO 2004/022739) was originally cited against certain claims of the application improperly under 35 USC § 102(e) and has been re-cited in the instant action under 35 USC § 102(a). Examiner Bristol also withdrew the objection to the drawings, as discussed in detail below.

<u>Information Disclosure Statements</u>

The Examiner has lined through and not considered reference 1 of the Information Disclosure Statement (IDS) submitted September 29, 2008. The Office action states (at page 3) that this reference is the "same" as a reference previously listed on the IDS submitted April 11, 2008, that the reference submitted September 29, 2008, is therefore "cumulative," and that the "cumulative" reference will therefore not be considered.

Applicants note for the record that reference 1 of the IDS submitted September 29, 2008 (US 2006/0188510), is not the "same" as the reference listed on the IDS submitted April 11,

Serial No.: 10/583,795 Filed: June 21, 2006 Page: 11 of 13

2008 (WO 03/100429). The references are a U.S. patent application publication and the publication of an International Application, respectively; are not related through any priority claims; and have no inventors in common. However, US 2006/0188510 was previously cited by the Examiner on a form PTO-892 with the Office action mailed March 27, 2008. Therefore, it appears that the reference has already been considered by the Examiner.

Drawing Objections

In the telephone interview with the undersigned on March 31, 2009, Examiner Bristol helpfully agreed to withdraw the requirement to submit marked-up copies of the Replacement Sheets of drawings submitted with the reply dated September 29, 2008. In full conformity with 37 CFR 1.121(d), the changes to the drawings—replacing the Japanese characters with their English translations—were explained in the remarks section of the reply dated September 29, 2008. Section 1.121(d)(1) does not require marked-up copies of drawing sheets: it merely states that marked-up copies of drawings may be included.

35 USC § 112, second paragraph

Claim 8 was rejected as allegedly being indefinite. Applicants disagree with the rejection but have canceled claim 8 without prejudice, solely to further prosecution. Applicants reserve the right to pursue claims of identical or similar subject matter in one or more continuation applications.

35 USC § 112, first paragraph

The rejection of claim 31 for alleged lack of enablement was maintained and also applied to new claims 35, 40, and 42. Applicants disagree with the rejection for at least the reasons of record. However, applicants have canceled claims 31, 35, 40, and 42 without prejudice, solely to further prosecution. Applicants reserve the right to pursue claims of identical or similar subject matter in one or more continuation applications.

Serial No.: 10/583,795 Filed: June 21, 2006 Page: 12 of 13

35 USC § 102

The rejections of claims 14 and 16 under 35 USC § 102(b) as being allegedly anticipated by Gonzalez et al. (J. Cell Biol. 141:1407-14, 1998) and Pilia et al. (Nature Genetics 12:241-247, 1996) were maintained and also applied to new claims 36 and 38. Applicants disagree with the rejections for at least the reasons of record. However, applicants have amended claims 14 and 16 to recite that the antibodies are monoclonal, solely to further prosecution. Neither Gonzalez et al. nor Pilia et al. teaches or suggests the isolated antibodies as recited in amended claims 14 and 16; the antibodies cited by the Office action are polyclonal. Therefore, claims 14 and 16 are novel over Gonzalez et al. and Pilia et al. Claims 36 and 38 depend from claims 14 and 16, and are therefore also novel over Gonzalez et al. and Pilia et al.

Claims 14-16, 32, 34, 36-38, and 41 were rejected under 35 USC § 102(a) as being allegedly anticipated by Aburatani et al. (EP 1 411 118) and Aburatani et al. (WO 2004/022739). Applicants disagree with the rejections but have amended claims 14 and 16 to recite that the antibodies are monoclonal, solely to further prosecution. Neither EP 1 411 118 nor WO 2004/022739 teaches or suggests the isolated antibodies as recited in amended claims 14 and 16; the antibodies cited by the Office action are polyclonal. Therefore, claims 14 and 16 are novel over EP 1 411 118 and WO 2004/022739. Claims 15, 32, 34, 36-38, and 41 depend from claims 14 and 16, and are therefore also novel over EP 1 411 118 and WO 2004/022739.

Double Patenting

The provisional rejection of claims 14 and 15 for alleged obviousness-type double patenting over claims 9 and 23-29 of copending Application No. 10/526,741 was maintained. Applicants request that the rejection be held in abeyance with regard to claims 14 and 15 and readdressed once the final scope of these claims has been determined.

Serial No.: 10/583,795 Filed: June 21, 2006 Page: 13 of 13

CONCLUSION

Applicants submit that all presently pending claims are allowable, confirmation of which by the Examiner is requested. Applicants do not concede any positions of the Examiner that are not expressly addressed above, nor do applicants concede that there are not other good reasons for patentability of the presented claims or other claims. Upon a finding that the examined claims are allowable, applicants request rejoinder of method claims 43-46 and 48-53, which depend from claims applicants believe are in condition for allowance.

No fees are believed to be required. Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 19672-003US1.

Respectfully submitted,

Date: April 6, 2009 /RSMcQuade/

Ryan S. McQuade, Ph.D.

Reg. No. 61,358

Fish & Richardson P.C. Customer No. 26161

Telephone: (617) 542-5070 Facsimile: (877) 769-7945

22156967.doc